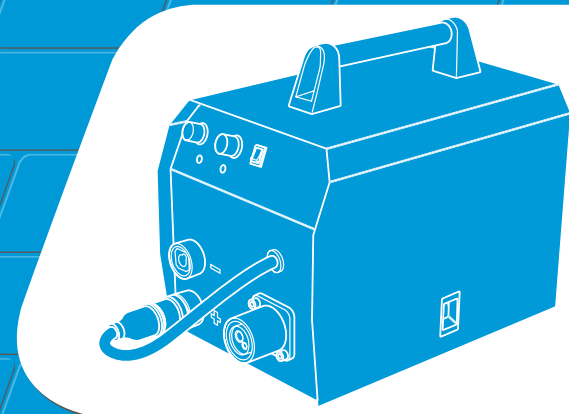


HSS Hire



Portable Mig Welder

A light weight MIG welding unit



Code 551B

EQUIPMENT CARE

Never push the equipment beyond its design limits. If it will not do what you want with reasonable ease, assume you have the wrong type of equipment for the job. Ask at your local HSS Hire for advice.

Keep the equipment clean. You will find this less of a chore if you clean up regularly rather than wait until the end of the hire period.

When not in use, store the equipment somewhere clean, dry and safe from thieves.

FINISHING OFF

Switch OFF and unplug the unit. Leave everything to cool then take the earth clamp off the work. Disconnect all leads and coil them up neatly ready for return, to your local HSS Hire.



... have you been trained

The law requires that personnel using this equipment must be competent and qualified to do so. Training available at HSS Training Solutions **0845 766 7799**

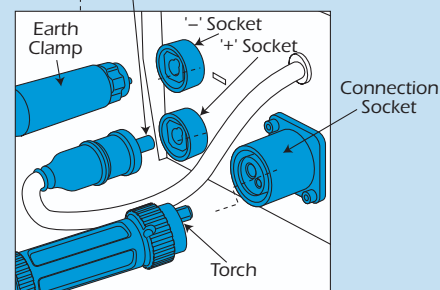
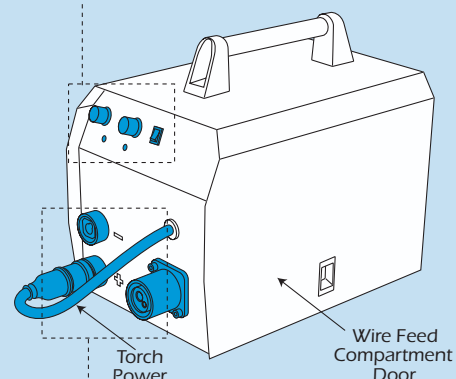
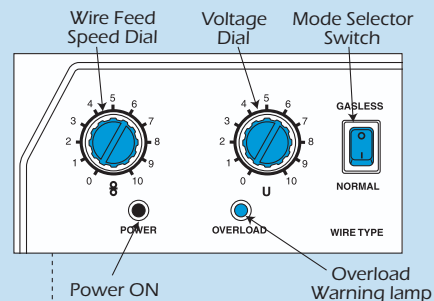
...any comments?

If you have any suggestions to enable us to improve the information within this guide please e-mail your comments or write to the Safety Guide Manager at the address below
e-mail: safety@hss.com

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Portable MIG Welder



Feed the wire through the wire feed roller and into the guide. Close the tensioning roller and set the tension. Close the compartment door and switch the welder ON.

The compartment door is fitted with a micro switch and if the door is not correctly closed the unit will not operate. If the fan runs but the power light is OFF the door is not closed correctly.

Feed the wire through to the torch until 10mm of wire is exposed then re-fit the tip and shield.

The welder offers a range of different settings to suit the type of welding task being performed.

Work through the following list of options selecting the settings best suited to the work.

Wire Feed Speed Dial...

Adjusts the speed at which the wire is fed to the work.

Voltage Dial...

Adjusts the welding voltage.

Mode selector switch...

Should be set to the type of MIG welding you are performing.

Set to 'gasless' when welding with no gas wire.

Set to 'normal' when welding with gas.

The unit is designed for both gas and no gas welding applications and both the earth clamp cable and torch power lead must be connected to the correct terminal. If using a no gas welding system, connect the earth clamp cable to the '+' positive socket and the torch power lead to the '-' negative socket. If using a gas welding system, connect the earth clamp cable to the '-' negative socket and the torch power lead to the '+' positive socket.

BASIC TECHNIQUES

Attach the leads and cables depending upon the type of wire used, then set the mode selector switch to normal or gasless.

Set the welding voltage and wire speed appropriate to the total thickness of the metal being welded.

Clamp the work pieces securely in their final positions to stop them moving during welding.

Ensure the metal to be welded is clean, dry and free from rust, paint and grease. Aim to weld only bright, bare metal.

Clip the earth clamp to the work, as close to the proposed weld as possible to ensure good electrical contact.

Switch the unit ON by moving the ON/OFF switch to the 'I' ON position.

If using a gas welding system, open the gas regulator to give a flow rate to suit the wire speed.

Expose about 10mm of wire before striking an arc. Hold the welding gun at an angle of 60-70 degrees to the surface, squeeze the trigger to strike an arc.

If you have difficulty in striking an arc, snip off all but about 10mm of exposed wire and try again.

Continue holding the trigger, keeping the arc about 5mm long and work slowly along the line of the joint. DO NOT allow the tip to touch the work. At the end of the weld simply release the trigger.

GENERAL SAFETY

For advice on the safety and suitability of this equipment contact your local HSS Hire.

There is a serious risk of personal injury if you do not follow all instructions laid down in this guide.

The hirer has a responsibility to ensure that all necessary risk assessments have been completed prior to the use of this equipment.

Most welding tasks may be considered as hot work in site situations and may be subject to specific permits to work.

This equipment should only be used by an operator who has been deemed competent to do so by his/her employer.

This equipment should be used by an able bodied, competent adult who has read and understood these instructions. Anyone with either a temporary or permanent disability, should seek expert advice before using it.

Warning!

During electric/electronic welding/cutting operations, intense magnetic & electrical fields are produced and these may interfere with other electronically sensitive equipment.

All personnel wearing Heart Pacemakers or other electronically controlled medical devices must be kept away from any electric/electronic welding/cutting operations.

The welding/cutting equipment should be installed at least 5metres away from any computer equipment to minimise any possible interaction.



Cables carrying signals between electronic devices are capable of picking up interference from electric/electronic welding/cutting operations. This interference may prejudice the way in which these devices function and therefore all signal carrying cables should also be sited outside the 5metre zone.


Do not place objects that are sensitive to magnetism (wristwatches, credit cards, computer discs etc) near the welding or cutting zone. They may be rendered useless.


The welding/cutting equipment is itself electronically sensitive and its position relative to other radiation emitting equipment (mobile phones, remote controls, motor speed controllers etc.) must be considered.


Keep children, animals and bystanders away from the work area. Cordon off a NO GO area using cones and either barriers or tape, available for hire from your local HSS Hire.

Welding screens are also available for hire from your local HSS Hire.

  Never use this equipment if you are ill, feeling tired, or under the influence of alcohol or drugs.

 Fumes produced by the cutting process, if inhaled, can be harmful to health. A suitable mask must be worn when using this equipment. Respiratory protective equipment is available for hire, contact your local HSS Hire for details.

 Skin must be covered – wear practical, protective clothing, gloves and footwear.

 A head shield with a 11EW shade MUST be worn by anyone in the work area – goggles are not suitable. Avoid loose garments and jewellery that could interfere with the work.

If the headshield or lens becomes damaged, return it to your local HSS Hire.

Never use this equipment near computers or any sensitive electronic equipment.

Always transport, store and operate the machine in an upright position.

Keep the power unit's air vents clear of all obstructions.

Always switch equipment OFF before making any adjustments to it. Never leave it switched ON and unattended.

Ensure the work area is well lit and ventilated, a fume extractor or smoke eliminator should be used. If in doubt, ask about lighting and ventilation equipment at your local HSS Hire.

Do not work near flammable gases or liquids, petrol or paint thinner fumes for example. Keep combustible materials at a safe distance - at least 5m.

Make sure you know how to switch this machine OFF before you switch it ON in case you get into difficulty.

Vehicle Safety

Before carrying out welding work on cars/lorries and similar vehicles...

Remove the vehicle's battery and disconnect the alternator.

Remove all combustible material and other fire/explosion hazards.

Check the condition of the equipment before use. If it shows signs of damage or excessive wear, return it to

your local HSS Hire.

COSHH information sheets are available from your local HSS Hire.


ELECTRICAL SAFETY

The HSS Portable Mig Welder requires a 230V 13amp power supply.

If the equipment fails, or if its power supply cable or plug becomes damaged, return it. Never try to repair it yourself.

Keep power supply cables and leads out of harm's way. Extension leads should be fully unwound and loosely coiled, away from the equipment. Never run them through water, over sharp edges, or where they could trip someone.

Keep the equipment dry, using electrical equipment in very damp or wet conditions can be dangerous.

 To reduce the risk of electric shock, always use a RCD suitable RCD (Residual Current-Operated Device) available from your local HSS Hire, or power the equipment from a mains circuit with a built-in RCD.

Ensure the welder and the power socket are switched OFF before plugging into the power supply.

GETTING STARTED

This guide is designed to help the user to safely set up and dismantle the welder. It is not intended as a guide to welding techniques as it is assumed that the user already has the necessary training/knowledge and experience.

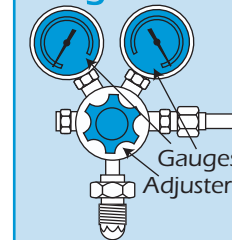
Duty Cycle

140A @ 60%

It is important that the equipment duty cycle is taken into consideration when in use. Place the

unit on a suitable surface and make sure that there is a minimum of 400mm clearance around the unit to allow a good circulation of air.

Regulator



DO NOT use the unit in the rain or in extremely damp environments.

Ensure that the unit is switched OFF and isolated from the power supply.

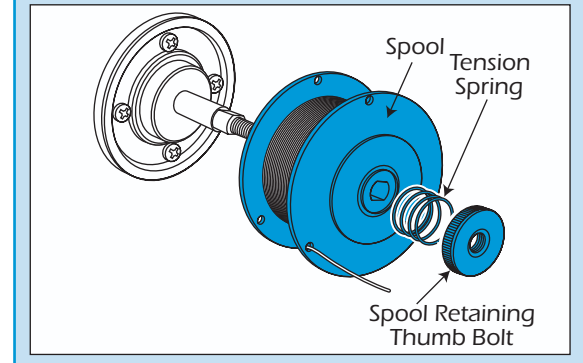
Connect the gas supply hose to the regulator then fit the regulator to the selected gas cylinder and secure with the spanner supplied. Attach the

MIG torch to the connection socket on the unit's front panel. Simply align the pipes and pins, insert and lock in place by turning the collar clockwise.

Open the wire feed compartment cover. Remove the torches shield and tip, pull through any remaining wire and remove any empty roll.

Unscrew the spool retaining thumb bolt and tension spring and place a new roll of wire onto the spool holder making sure that the wire is fed from the bottom of the roll. Check the wire feed roller to ensure it is the correct size for the wire being used. To remove the feed rollers, loosen and remove the thumbscrew followed by the feed roller.

Spool Assembly



Slide the roller from the shaft and confirm that it is correct. To replace the roller, simply reverse the removal instructions.

Pull approximately 150mm of wire from the roll ensuring you DO NOT let go of the wire (as the wire will spring loose). Snip the end of the wire to leave a straight leading piece.

Wire Feed Unit

